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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,056	03/31/2004	Niniane Wang	24207-10082	5718

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PATENT DEPARTMENT - 53051  
KILPATRICK STOCKTON LLP  
1001 WEST FOURTH STREET  
WINSTON-SALEM, NC 27101

EXAMINER
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DAYE, CHELCIE L

ART UNIT	PAPER NUMBER
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2161

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/19/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	Application No. 10/814,056	Applicant(s) WANG ET AL.	
	Examiner Chelcie Daye	Art Unit 2161	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 05 February 2007.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4, 6-13, 15-24, 26-33 and 35-37 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 4, 6-13, 15-24, 26-33 and 35-37 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. This action is issued in response to applicant's amendment filed February 5, 2007.
2. Claims 1-37 are presented. No claims were added and claims 5, 14, 25, and 34 are cancelled.
3. Claims 1-4, 6-13, 15-24, 26-33, and 35-37 are pending.
4. Applicant's arguments filed February 5, 2007, have been fully considered but they are not persuasive.

### ***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. **Claims 1-4, 6, 9-11, 15-24, 26, 29-34, and 35-37 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis (US Patent Application No. 20040215607) filed April 25, 2003, in view of Linden (US Patent Application No. 20020019763) filed March 29, 2001.**

Regarding Claims 1 and 21, Travis discloses a method comprising:

obtaining from an index a search result associated with a current search query ([0004], lines 1-8, Travis), the search result comprising a first article identifier (Fig.2A; [0026], lines 8-10, Travis)<sup>1</sup>;

providing a content display comprising a second article identifier (Fig.2A; [0026], lines 12-14, Travis)<sup>2</sup>. However, while Travis discloses the content display (Fig.1B), Travis is silent with respect to determining whether to update the content display with the search result. On the other hand, Linden discloses determining whether to update the content display with the search result ([0195], Linden). Travis and Linden are analogous art because they are from the same field of endeavor of determining the relationship between items in viewable areas. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Linden's teachings into the Travis system. A skilled artisan would have been motivated to combine as suggested by Linden at [0012], in order to identify items that are related to one another based on the activities of a group of users. As a result, providing personalized item recommendations to users along with related items. Therefore, the combination of Travis in view of Linden, disclose the determining comprising comparing the current search query to a previous search query associated with the content display ([0029] and [0031], Travis); and responsive to a positive determination to update the content display, updating the content display ([0136] and [0195], Linden)<sup>3</sup>.

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<sup>1</sup> Examiner Notes: Fig.2A, item 266 corresponds to the first article identifier.

<sup>2</sup> Examiner Notes: Fig.2A, the second results 260-2, represent the second article identifier.

<sup>3</sup> Examiner Notes: The positive determination is made when the user selects the update page button, in order to notify the system to proceed with the updating of the information.

Regarding Claims 2 and 22, the combination of Travis in view of Linden, disclose the method wherein the first article identifier comprises a first relevancy measure, and the second article identifier comprises a second relevancy measure (Fig.2A; [0026], lines 8-14, Travis)<sup>4</sup>.

Regarding Claims 3 and 23, the combination of Travis in view of Linden, disclose the method wherein determining whether to update the content display comprises comparing the first relevancy measure with the second relevancy measure ([0029], lines 7-12, Travis).

Regarding Claims 4 and 24, the combination of Travis in view of Linden, disclose the method further comprising updating the content display when the first relevancy measure exceeds the second relevancy measure ([0029], Travis).

Regarding Claims 6 and 26, the combination of Travis in view of Linden, disclose the method further comprising updating the content display when the current search query and the previous search query differ by more than a predetermined percentage or amount ([0081], Linden).

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<sup>4</sup> Examiner Notes: Fig.2A, item 268 corresponds to the first relevancy measure and item 274 corresponds to the second relevancy measure.

Regarding Claims 9 and 29, the combination of Travis in view of Linden, disclose the method wherein determining whether to update the content display comprises comparing the first article identifier to the second article identifier ([0029], lines 7-12, Travis).

Regarding Claims 10 and 30, the combination of Travis in view of Linden, disclose the method further comprising updating the content display when the first article identifier and the second article identifier are different ([0029], Travis).

Regarding Claims 11 and 31, the combination of Travis in view of Linden, disclose the method wherein determining whether to update the content display comprises monitoring a mouse pointer associated with the content display ([0025], Travis).

Regarding Claims 15 and 35, the combination of Travis in view of Linden, disclose the method wherein updating the content display comprises replacing the first article identifier with the second article identifier ([0027], Travis).

Regarding Claims 16 and 36, the combination of Travis in view of Linden, disclose the method wherein the first article identifier comprises a first plurality of article identifiers and the second article identifier comprises a second plurality of

article identifiers and further comprising replacing the second plurality of article identifiers with the first plurality of article identifiers (Fig.2A; [0027], Travis).

Regarding Claims 17 and 37, the combination of Travis in view of Linden, disclose the method wherein the first article identifier comprises a first plurality of article identifiers and the second article identifier comprises a second plurality of article identifiers and further comprising merging the first plurality of article identifiers with the second plurality of article identifiers (Fig.2A; [0029], lines 1-4, Travis).

Regarding Claims 18-20, the combination of Travis in view of Linden, disclose the method wherein the index comprises a global index ([0055], Travis) and a local index ([0003], lines 1-9, Travis).

**7. Claims 7-8 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis (US Patent Application No. 20040215607) filed April 25, 2003, in view of Linden (US Patent Application No. 20020019763) filed March 29, 2001, as applied to claims 1-6,9-11,14-26,29-31,and 34-37 above, and further in view of Barrett (US Patent Application No. 20030135490) filed January 15, 2002.**

Regarding Claims 7 and 27, the combination of Travis in view of Linden, disclose all of the claimed subject matter as stated above. However the

combination of Travis in view of Linden, are silent with respect to determining whether each term in the current search query is also in the previous search query. On the other hand, Barrett discloses determining whether each term in the current search query is also in the previous search query ([0034], lines 7-14, Barrett). Travis, Linden, and Barrett are analogous art because they are from the same field of endeavor of providing relevant results in response to queries within large databases. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Barrett's teachings into the Travis in view of Linden system. A skilled artisan would have been motivated to combine as suggested by Barrett at [0002], lines 12-18, in order to provide a technique which takes into account the age of uses, as well as other factors needed to refine relevant search results for users seeking information. As a result, the determination of whether each term in the current query is in the previous query helps increase efficiency and speed of the system.

Regarding Claims 8 and 28, the combination of Travis in view of Linden, and further in view of Barrett, disclose the method wherein comparing the current search query to the previous search query comprises determining the percentage of terms in the current search query that are also in the previous search query ([0034], lines 14-20, Barrett).



**8. Claims 12-13 and 32-33 are rejected under 35 U.S.C. 103(a) as being unpatentable over Travis (US Patent Application No. 20040215607) filed April 25, 2003, in view of Linden (US Patent Application No. 20020019763) filed March 29, 2001 as applied to claims 1-6,9-11,14-26,29-31,and 34-37 above, and further in view of Petropoulos (US Patent No. 7,047,502) filed September 24, 2001.**

Regarding Claims 12 and 32, the combination of Travis in view of Linden, disclose all of the claimed subject matter as stated above. However, the combination of Travis in view of Linden, are silent with respect to the mouse pointer not active in the content display. On the other hand, Petropoulos discloses to the mouse pointer not active in the content display (column 7, lines 23-41, Petropoulos). Travis, Linden, and Petropoulos are analogous art because they are from the same field of endeavor of webpage searching on the Internet or Intranet. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate Petropoulos' teachings into the Travis in view of Linden system. A skilled artisan would have been motivated to combine as suggested by Petropoulos at column 2, lines 54-62, in order to provide preview information, which contains relevant information in the results list. As a result, improving the efficiency of analyzing search results and using the data gathered to refine and improve the search process.

Regarding Claims 13 and 33, the combination of Travis in view of Linden, and further in view of Petropoulos, disclose the method further comprising updating the content display when the mouse pointer is not approaching the content display (column 7, lines 57-62, Petropoulos).

### ***Response to Arguments***

*Applicant argues neither Travis nor Linden teach the concept of “current and previous search queries, nor determining whether to update the content display by comparing the current search query to a previous search query”.*

Examiner respectfully disagrees. As stated in the action above, Travis discloses at paragraphs [0029] and [0031], wherein “entries from result set 260-1 and result set 260-2 are combined based on transformed scores and relevance scores. Some embodiments first select the entry having the largest score from amongst the transformed scores of the first result and the relevance scores of the second result. For example, entry 262-1 is selected for the first position in the blended result because the corresponding transformed score of entry 262-1, having a value of 0.99, is higher than any of the relevance scores and any other transformed scores ...”. Examiner interprets, the result set 260-1, which is the first search source, to correspond to the previous search query, since this query was the first search received by the search engine and the result set 260-2 to correspond to the current result set, since it was the second search received by the search engine, allowing it to be the most current. A further explanation of the search result sets can be found at paragraph [0026]. Next, Examiner

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interprets the combining of the scores into the blended result set, by determining and selecting the result with the higher score first and so on, to correspond to the comparing current search query to the previous search query. Lastly, Linden discloses at paragraph [0195], wherein *"each recently-viewed item is displayed together with a check box to allow the user to individually deselect the item. De-selection of an item causes the Session Recommendations component to effectively remove that item from the list of "items of known interest" for purposes of generating subsequent Session Recommendations. A user may deselect an item if, for example, the user is not actually interested in the item (e.g., the item was viewed by another person who shares the same computer). Once the user de-selects one or more of the recently viewed items, the user can select the "update page" button to view a refined list of Session Recommendations. When the user selects this button, the HTTP/XML application deletes the de-selected item(s) from the corresponding session record in the click stream table, or marks such items as being deselected. The Session Recommendations process then regenerates the Session Recommendations using the modified session record"*. Examiner interprets the selection and de-selection of the items and the selection of the "update page" button, which is used to refine a list of recommendations and generate a modified list of items, to correspond to the positive determination being made to update the content display. Further examples can be found within paragraph [0136]. Therefore, the combination of Travis in view of Linden, are believed to fully disclose the argued limitation above.

*Applicant argues, Linden does not teach, "determining whether search queries differ by more than a predetermined percentage or amount".*

Examiner respectfully disagrees. As stated in the action, Linden discloses at paragraph [0081], wherein *"each similar items list consists of the N items, which based on correlations between purchases of items, are deemed to be the most closely related to the respective popular item. Each item in the similar items list is stored together with a commonality index value which indicates the relatedness of that item to the popular item ... A relatively high commonality index for a pair of items (ITEM A and ITEM B) indicates that a relatively large percentage ... A relatively low commonality index for a pair of items indicates that a relatively small percentage ..."*. Examiner interprets the correlation between the popular items (which satisfies a pre-specified popularity criteria) and the similar items, to produce a commonality index (which indicates the relatedness of the items) to correspond to a predetermined percentage difference between the current and previous search query. Further explanations of the search queries differing by a predetermined percentage can be found at paragraphs [0046], [0079], [0121-0123], [0129], and [0136]. Therefore, the combination of Travis in view of Linden, are believed to fully disclose the argued limitation above.

*Applicant argues, Barrett does not "determine whether each term in a current search query is also in a previous search query".*

Examiner respectfully disagrees. As stated in the action, Barrett discloses at paragraph [0034], wherein *"the present invention maintains two different hypothetical*

*enhanced popularity scores for each key term for each site, each hypothetical score using one of the decay rates".* Examiner interprets the maintaining of each key term using the decay rates to correspond to determining whether each term in a current query is in a previous query. Further explanation of the decay rates can be found at paragraph [0013], lines 12-19, wherein *"a prior use on the same day as when the query is entered may receive 100% value whereas the value for each previous day is reduced by 1%".* Also, paragraph [0047], further details to relate one query to another by relating the key terms from the queries. As a result, Barrett fully discloses the argued limitation above.

*Applicant argues Petropoulos does not remedy the deficiencies of Travis, Linden, and Barrett, and in particular the step of determining whether to update a content display by comparing a current search query to a previous search query.*

Examiner does not believe this argument to be of relevance. The Petropoulos reference was not relied upon to disclose the limitation of "determining whether to update a content display by comparing a current search query to a previous search query". However, the combination of Travis in view of Linden, were relied upon and are believed to fully disclose the limitations. Therefore, applicant's argument that Petropoulos does not remedy the deficiencies is unwarranted, because it is believed that there are no deficiencies to remedy.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action.

Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.


***Points of Contact***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chelcie Daye whose telephone number is 571-272-3891. The examiner can normally be reached on M-F, 7:00 - 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Apu Mofiz can be reached on 571-272-4080. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chelcie Daye  
Patent Examiner  
Technology Center 2100  
April 12, 2007

  
Apu Mofiz  
SP5 TC2100